

SUPPORT FOR THE AMENDMENT

Claims 10, 32-34 and 36-40 were previously canceled.

Claims 1-9 and 11-30 are canceled herein.

Claims 41-59 have been amended.

New Claims 41-55 are supported by previously pending Claim 31 and pages 10-49 as originally filed, including page 14, line 7 to page 15, line 2 and page 41, lines 8-17. New 56-57 are supported by the original specification, for example, at page 22, lines 10-20. New Claims 58-59 are supported by the original specification, for example, at page 22, line 22 to page 23, line 27.

No new matter has been entered by the present amendment.

REMARKS

Claims 31, 35, and 41-59 are pending in the present application.

At the outset, Applicants note that the Examiner has made this rejection final alleging that Applicants' amendment necessitated the new rejection. Clearly this allegation is without any merit whatsoever. The Examiner is reminded that the amendment to Claim 31 was to add the limitation of Claim 33, which the Examiner himself indicated as being allowable in the previous Office Action. Thus, any new art cited over the claims could have been and, indeed, should have been made of record in the previous action. The simple fact is that the amendment to the claims did not necessitate the new ground of rejection, it was the Examiner's late realization of new art that should have been previously cited that necessitated the new ground of rejection. The Examiner is reminded of MPEP §706.07(a) for the guidance as to when a final rejection should be made. Applicants submit that in view of the Examiner's improper handling of this application, should any new Office Action be issued it should be in the form of a new *non-final* Office Action.

The rejection of Claims 31 and 35 under 35 U.S.C. §103(a) over Michaeli et al in view of Greene and Park et al is respectfully traversed.

Claims 31 and 35 are rejected as being unpatentable over Michaeli et al, in view of the combined teachings of Greene and Park et al. In the Office Action, the Examiner recognizes that Michaeli et al differs from the claimed invention, at least, in that this reference does not teach a recombinant Escherichia bacterium deficient in the metJ gene encoding a repressor of the L-methionine biosynthesis gene. The Examiner alleges that Greene teach the E. coli repressor of the L-methionine biosynthesis system encoded by the metJ gene. Now the

Examiner alleges that Park et al teach the enzyme E. coli metK gene encoding S-adenosylmethionine synthetase which catalyzes the synthesis of S-adenosyl-L-methionine (SAM), where SAM is a major methyl group transfer agent in biological systems and the methyl moiety of SAM is transferred to proteins, lipids, nucleic acids, and vitamins by SAM-dependent methyltransferases.

However, in Park et al, the central theme is the enzymatic synthesis of SAM using S-adenosylmethionine synthetase encoded by the metK gene. This enzyme is subject to product inhibition. To avoid the problem, Park et al searched additives which overcome product inhibition of the enzyme as summarized in Table 1. Thus, an object and standpoint of Park et al are completely different from those of the present invention or other cited references.

Park et al do not disclose or suggest disruption of metK gene and application of this gene to breeding of L-methionine producing strains. Therefore, there would be no motivation for a person skilled in the art to combine Park et al with Michaeli et al and Greene.

Moreover, Park et al disclose that S-adenosylmethionine synthetase is subject to product inhibition. Therefore, the skilled artisan would not be motivated to disrupt the metK gene unless there is information that L-methionine producing strains do not suffer from the above-mentioned product inhibition, or the inhibition is desensitized in L-methionine producing strains. Such a disclosure does not exist in the cited art.

For the reasons above, Applicants submit that even if the artisan were to have Park et al in hand, the combined disclosures of this reference with Michaeli et al and Greene would not be sufficient to render the claimed invention even *prima facie* obvious. Therefore, withdrawal of this ground of rejection is requested.

Applicants submit that the present application is now in condition for allowance. Early notification of such action is earnestly solicited.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.



Stephen G. Baxter
Attorney of Record
Registration No. 32,884

Vincent K. Shier, Ph.D.
Registration No. 50,552

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 08/03)